



# WALRUS®



## TPH Series 50Hz Multistage Centrifugal Pump





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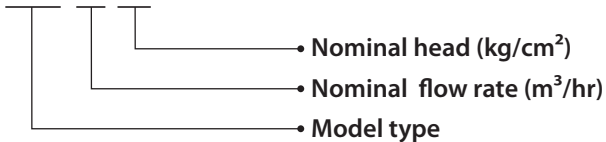
## Applications

The WALRUS TPH Series is horizontal multistage centrifugal pump, suitable for clean water/liquid without abrasive matters. The applications are versatile, such as pressure boosting, transfer, circulation, and machinery.

- Industrial circulation system
- Washing/cleaning system
- Pressure booster system
- Water/liquid transfer
- Agricultural irrigation

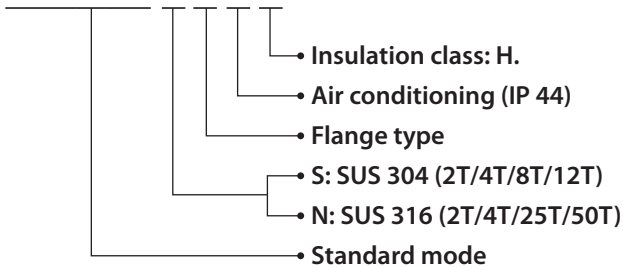
## Standard mode

TPH 4T 2K



## Code

TPH 4T 2K S F A H



## Operation conditions

Ambient temperature :Max. +40°C  
 Liquid temperature range:+0°C ~ +90°C  
 Operating pressure:Max. 10 kg/cm<sup>2</sup>  
 Inlet pressure:Max. 6 kg/cm<sup>2</sup>

## Pump construction

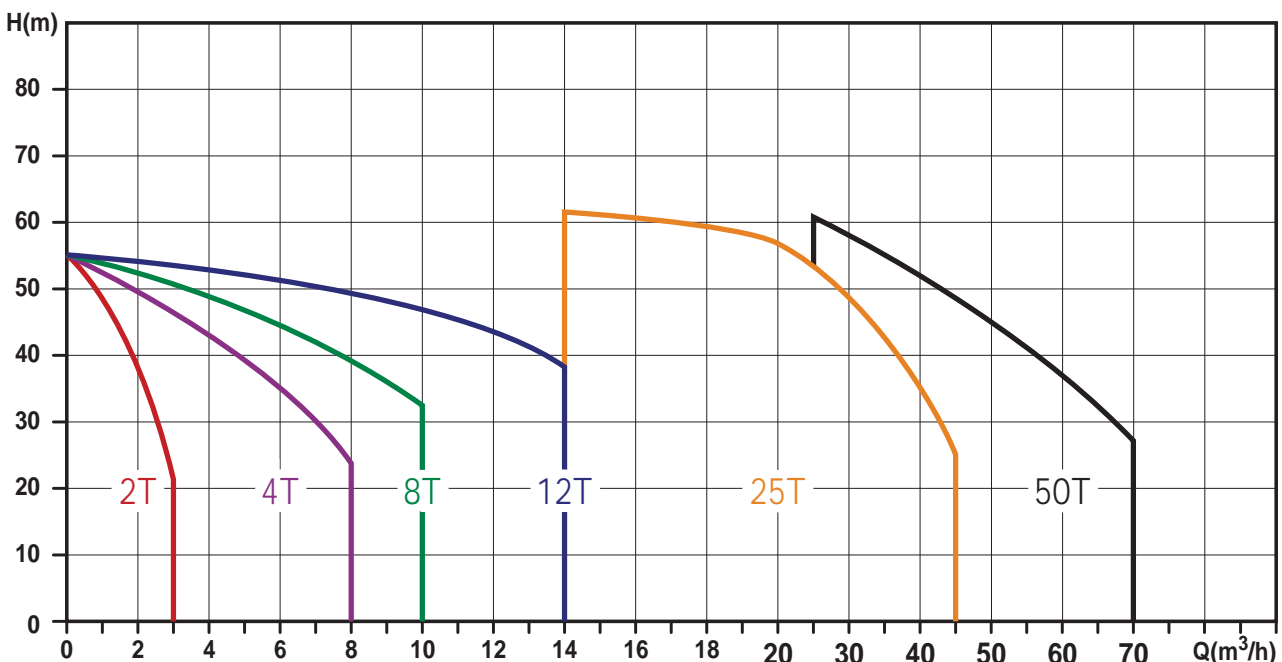
Horizontal multistage centrifugal pump, non self-priming, co-axial pump/motor design, impellers mounted on extended motor shaft. Main working parts made by stainless steel.

## Motor

Enclosure protection class: IP54  
 Insulation class: F.  
 Frequency range: 50 Hz  
 Nominal speed : 2900 rpm  
 Standard voltages:

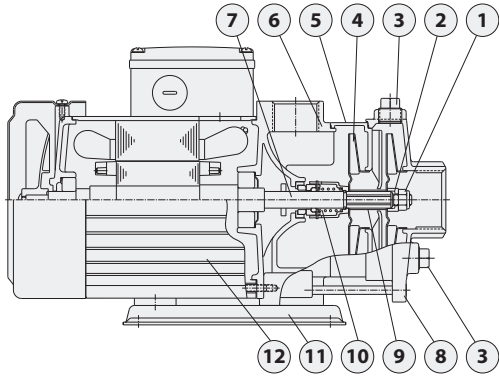
voltage code	PH (Ø)	Cycle (Hz)	Volts (V)
1R	1	50	200-240
3Q	3	50	200-240 / 380-440

## Performance range

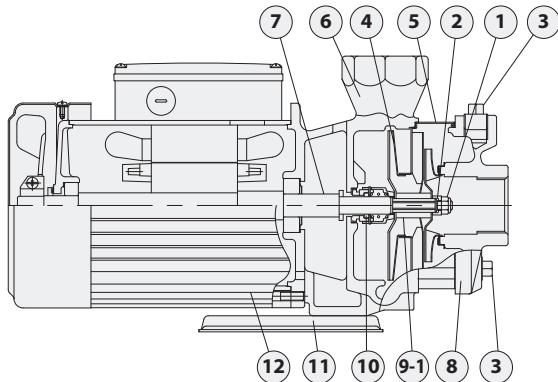


### Sectional drawing

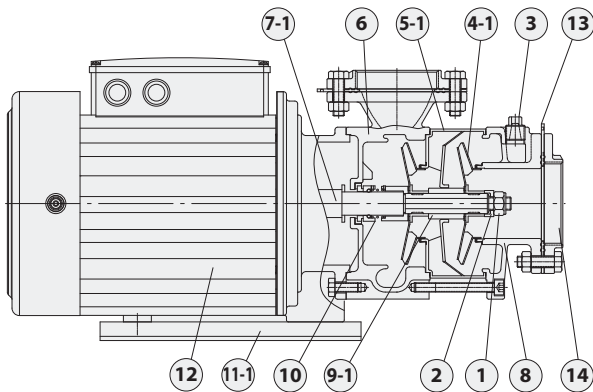
(TPH2/4T)



(TPH 8/12T)



(TPH 25/50T)



### Material construction

No.	Part name	Material		
		Standard	S series	N series
1	Lock Nut	SUS 316	SUS 316	SUS 316
2	Sleeve(Shaft End)	SUS 316	SUS 316	SUS 316
3	Water Plug	FC 20	SUS 304	SUS 316
4	Impeller	SUS 304	SUS 304	SUS 316
4-1	Impeller	SUS 316	-	SUS316
5	Intermediate Chamber	SUS 304	SUS 304	SUS 316
5-1	Intermediate Chamber	SUS 316	-	SUS 316
6	Pump Casing	FC 20	SUS 304	SUS 316
7	Shaft	SUS 304	SUS 304	SUS 316
7-1	Shaft	SUS 316	-	SUS 316
8	Suction Chamber	FC 20	SUS 304	SUS316
9	Sleeve	SUS 304	SUS 304	SUS 316
9-1	Sleeve	SUS 316	SUS 316	SUS 316
10	Mechanical Seal	HGSH		
11	Mounted Base	Coating Steel	SUS 316	
11-1	Mounted Base	Coating Steel		
12	Motor Shell	Aluminum alloy		
13	Gasket	Teflon+NBR		
14	Flange	FC 20	-	SUS 316

SUS 304 may be replaced by SUS316 depended on stock availability.

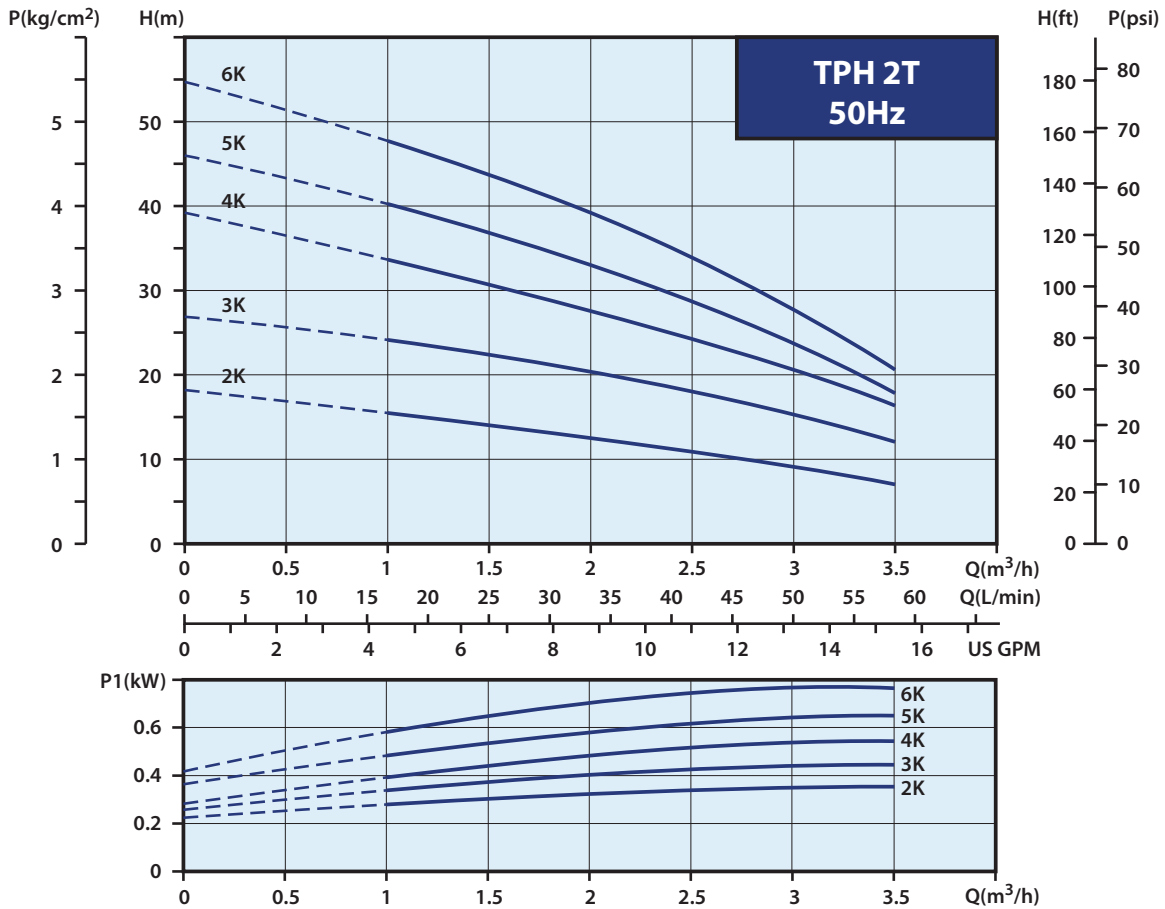
### Options on request

- Other voltages or frequency 60Hz
- Terminal box position adjustable
- Special mechanical seal

Mechanical seal type	Material	
	Stationary Face/ Rotary Face	Cup Gasket & O Ring
HGSH HGSV HGSE	(G)Carbon/ (S)Silicium carbide	(H) HNBR (V) Viton (E) EPDM
HTTH HTTV HTTE	(T)Tungsten Carbide/ (T)Tungsten Carbide	
HSSH HSSV HSSE	(S)Silicium carbide/ (S)Silicium carbide	



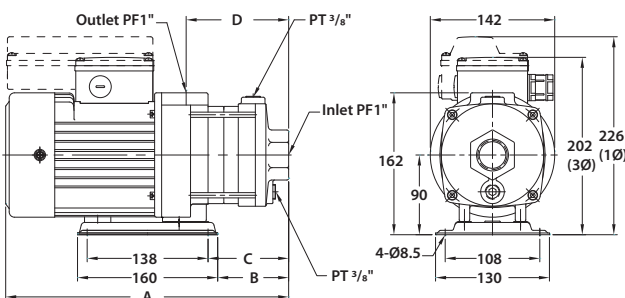
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 2T 2K	1	1R	50	200-240	450	2.4
	3	3Q	50	200-240 / 380-440	420	2.0 / 1.3
TPH 2T 3K	1	1R	50	200-240	500	2.5
	3	3Q	50	200-240 / 380-440	520	2.2 / 1.4
TPH 2T 4K	1	1R	50	200-240	600	2.9
	3	3Q	50	200-240 / 380-440	590	2.3 / 1.4
TPH 2T 5K	1	1R	50	200-240	760	4.0
	3	3Q	50	200-240 / 380-440	680	3.0 / 1.9
TPH 2T 6K	1	1R	50	200-240	880	4.3
	3	3Q	50	200-240 / 380-440	860	3.1 / 2.0

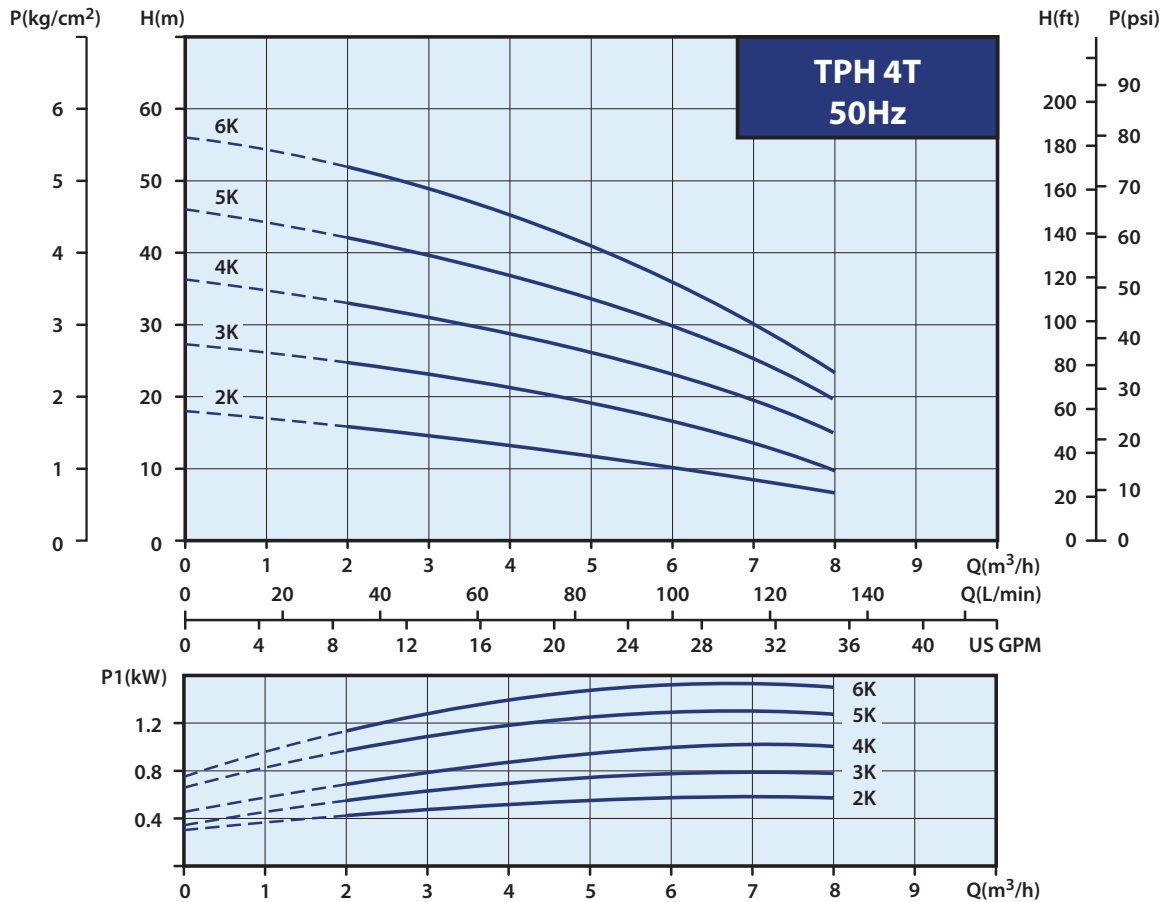
## Dimensions ( mm )



Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)	
TPH 2T 2K	305	63	74	99	11.8	36 pcs
TPH 2T 3K	323	81	92	117	11.9	
TPH 2T 4K	341	99	110	135	12.0	
TPH 2T 5K	399	117	128	153	13.5	30 pcs
TPH 2T 6K	417	135	146	171	13.6	



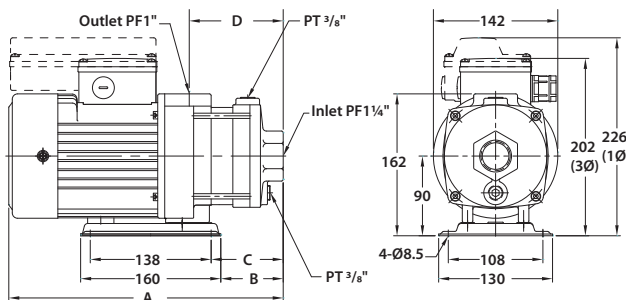
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 4T 2K	1	1R	50	200-240	600	3.1-2.9
	3	3Q	50	200-240 / 380-440	600	2.3 / 1.4
TPH 4T 3K	1	1R	50	200-240	950	4.5
	3	3Q	50	200-240 / 380-440	830	3.3 / 2.1
TPH 4T 4K	1	1R	50	200-240	1200	5.7
	3	3Q	50	200-240 / 380-440	1010	3.7 / 2.2
TPH 4T 5K	1	1R	50	200-240	1370	6.9
	3	3Q	50	200-240 / 380-440	1300	4.1 / 2.4
TPH 4T 6K	1	1R	50	200-240	1470	7.7
	3	3Q	50	200-240 / 380-440	1640	5.5 / 3.5

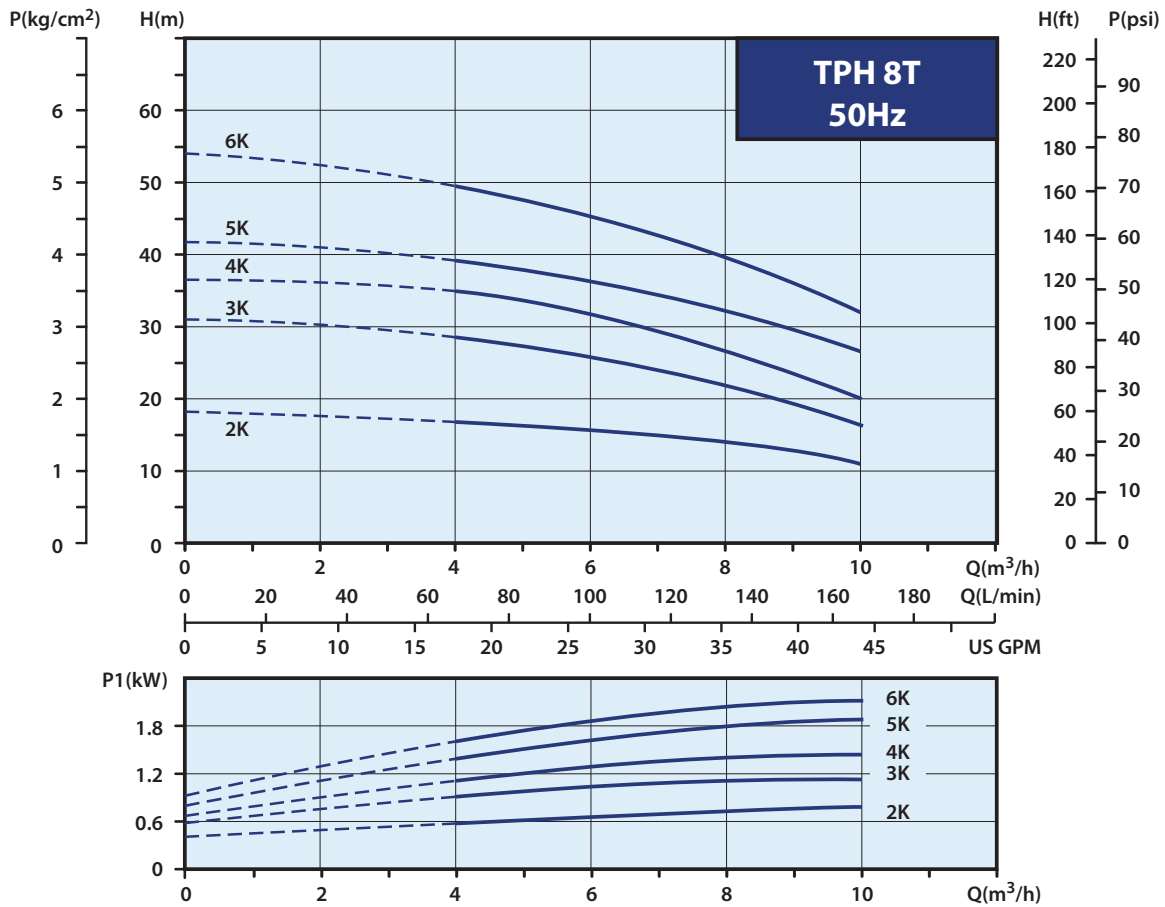
## Dimensions ( mm )



Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)	
TPH 4T 2K	315	73	84	109	11.7	36 pcs
TPH 4T 3K	381	99	110	135	13.3	30 pcs
TPH 4T 4K	408	126	137	162	14.1	
TPH 4T 5K	435	153	164	189	14.2	
TPH 4T 6K	462	181	192	217	16.1	



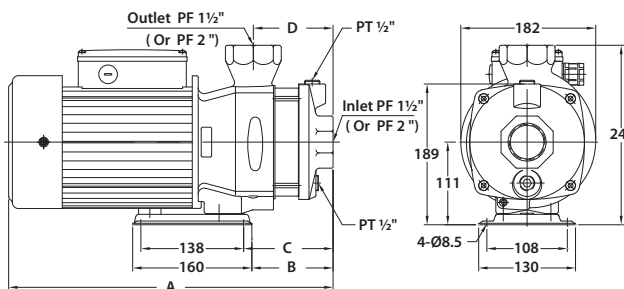
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 8T 2K	1	1R	50	200-240	900	4.3
	3	3Q	50	200-240 / 380-440	810	3.0 / 1.9
TPH 8T 3K	1	1R	50	200-240	1300	6.3
	3	3Q	50	200-240 / 380-440	1110	3.3 / 2.1
TPH 8T 4K	1	1R	50	200-240	1520	7.6
	3	3Q	50	200-240 / 380-440	1600	5.6 / 3.5
TPH 8T 5K	3	3Q	50	200-240 / 380-440	2000	6.0 / 3.6
TPH 8T 6K	3	3Q	50	200-240 / 380-440	2230	6.7 / 3.9

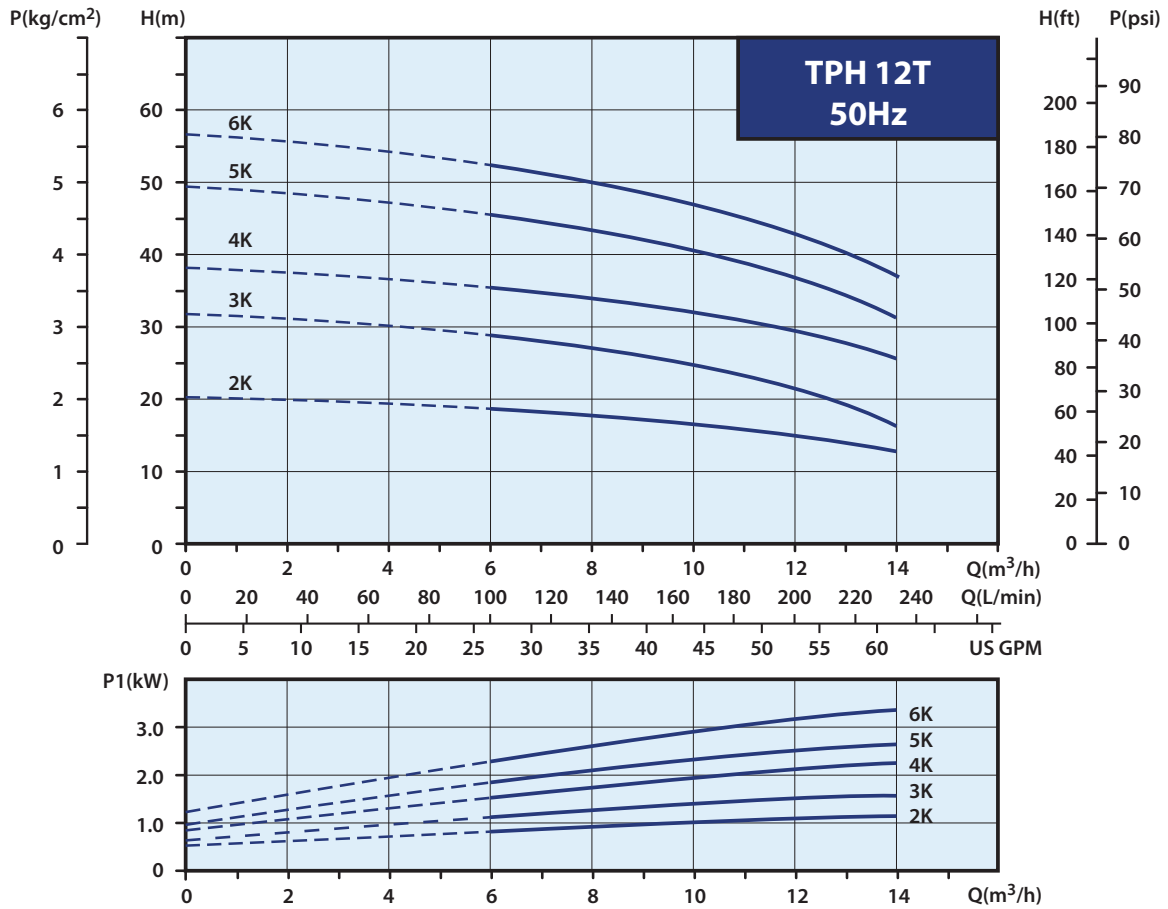
## Dimensions ( mm )



Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)	24 pcs
TPH 8T 2K	375	77	88	75	18.8	
TPH 8T 3K	407	109	120	107	19.5	
TPH 8T 4K	407	109	120	107	20.0	
TPH 8T 5K	473	143	154	141	25.5	
TPH 8T 6K	473	143	154	141	25.5	



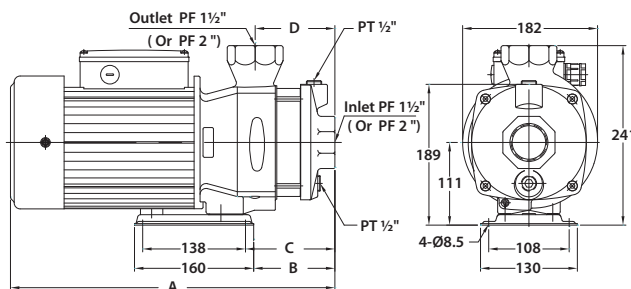
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 12T 2K	1	1R	50	200-240	1380	6.5
	3	3Q	50	200-240 / 380-440	1140	3.6 / 2.1
TPH 12T 3K	1	1R	50	200-240	1700	7.9
	3	3Q	50	200-240 / 380-440	1580	5.8 / 3.6
TPH 12T 4K	3	3Q	50	200-240 / 380-440	2500	7.1 / 4.1
TPH 12T 5K	3	3Q	50	200-240 / 380-440	3050	10.8 / 6.8
TPH 12T 6K	3	3Q	50	200-240 / 380-440	3700	11.3 / 7.0

## Dimensions ( mm )

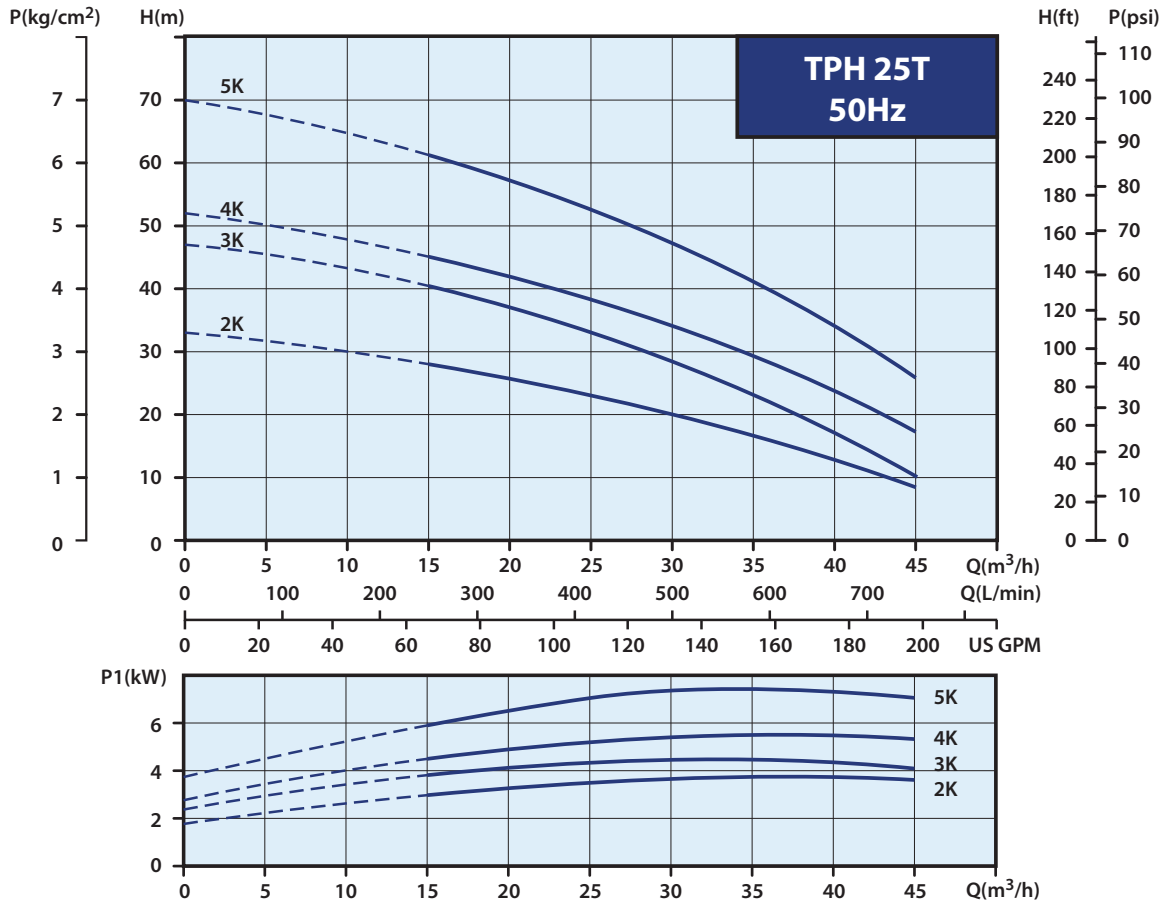


Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)	24 pcs
TPH 12T 2K	375	77	88	75	20.0	
TPH 12T 3K	407	109	120	107	20.0	
TPH 12T 4K	435	109	120	107	25.4	
TPH 12T 5K	473	143	154	141	29.2	
TPH 12T 6K	473	143	154	141	29.2	





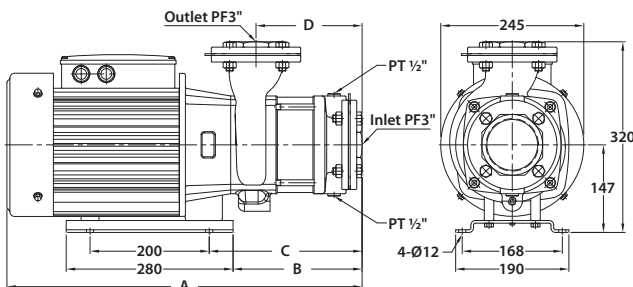
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 25T 2KF	3	3Q	50	200-240 / 380-440	4000	12.0 / 6.5
TPH 25T 3KF	3	3Q	50	200-240 / 380-440	4800	15.6 / 10.0
TPH 25T 4KF	3	3Q	50	200-240 / 380-440	5700	18.0 / 11.3
TPH 25T 5KF	3	3Q	50	200-240 / 380-440	7800	24.1 / 13.9

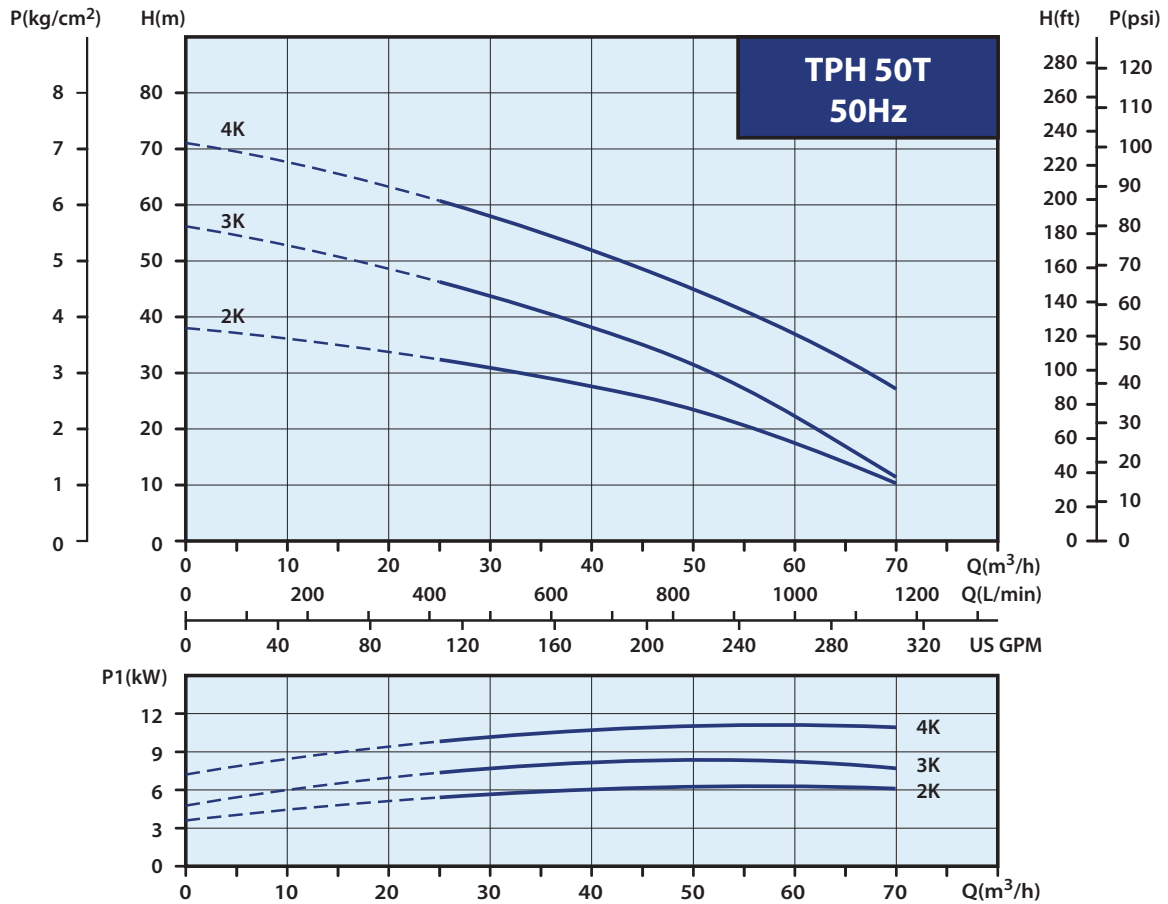
## Dimensions ( mm ), 50Hz



Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 25T2KF	596	216.5	256.5	180	53.0
TPH 25T3KF	656	276.5	316.5	240	58.8
TPH 25T4KF	656	276.5	316.5	240	59.0
TPH 25T5KF	766	336.5	376.5	300	71.0



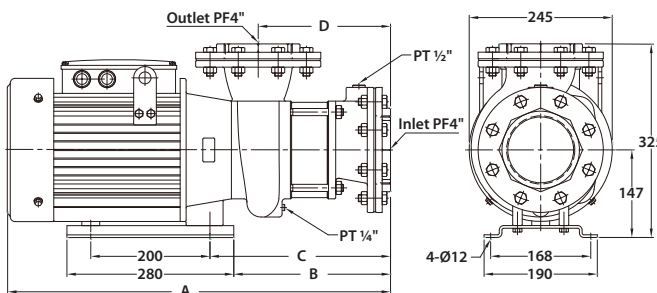
## Performance curves



## Electrical data, 50Hz

Model	PH (Ø)	voltage code	Cycle (Hz)	Volts (V)	Input Power (W)	Input Ampere (A)
TPH 50 T 2 KF	3	3Q	50	200-240 / 380-440	6600	20.3-19.2 / 11.2-12.9
TPH 50 T 3 KF	3	3Q	50	200-240 / 380-440	8700	26.0-22.6 / 14.4-14.8
TPH 50 T 4 KF	3	3Q	50	200-240 / 380-440	11600	36.3-30.8 / 19.8-20.4

## Dimensions ( mm ), 50Hz



Model	A(mm)	B(mm)	C(mm)	D(mm)	N.W.(kg)
TPH 50T 2KF	642.5	263	303	222	61.5
TPH 50T 3KF	752.5	323	363	282	80.6
TPH 50T 4KF	802.5	323	363	282	88.0



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TPH



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